

+

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

2004 Substitute for form 1449/APTO

**Complete if Known**

Sheet	1	of	2	Attorney Docket Number	2002-IP-008437 U1 USA
-------	---	----	---	------------------------	-----------------------

[illegible][illegible]

7 Nov 15

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

+

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
<b>Application Number</b>	10/773,899		
<b>Filing Date</b>	February 6, 2004		
<b>First Named Inventor</b>	David J. Steele		
<b>Group Art Unit</b>	<del>Unassigned</del> 3672		
<b>Examiner Name</b>	<del>Unassigned</del>		
<b>Attorney Docket Number</b>	2002-IP-008437 U1 USA		
<b>Sheet</b>	2	<b>of</b>	2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
H	-	U.S. Patent Application Serial No. 10/121,471 filed April 11, 2002	-
H	-	U.S. Patent Application Serial No. 10/348,212 filed January 21, 2003	H
H	-	Web page: <a href="http://www.pml.tno.nl:80/en/em/ap-welding.html">www.pml.tno.nl:80/en/em/ap-welding.html</a> , "Explosive Welding and Cladding of Metals", undated	H
H	-	Web page: <a href="http://www.mdacomposites.org/materials.htm">http://www.mdacomposites.org/materials.htm</a> , "FRP Composite Materials: An Overview", undated	H
H	-	Web page: <a href="http://www.engr.siu.edu/staff2/abrake/rtn/relate.htm">http://www.engr.siu.edu/staff2/abrake/rtn/relate.htm</a> , Southern Illinois University, "RTM Related Processes", dated 2000	H
H	-	Web page: <a href="http://www.highenergymetals.com/">http://www.highenergymetals.com/</a> , High Energy Metals, Inc. "Explosive Metalworking Experts", dated undated	H
H	-	Web page: <a href="http://www.highenergymetals.com/Engineering%20and%20Design%20Basics%20Web%20Page.pdf">http://www.highenergymetals.com/Engineering%20and%20Design%20Basics%20Web%20Page.pdf</a> , High Energy Metals, Inc., "Explosion Bonding Engineering and Design Basics", dated March 8, 2000	H

<b>Examiner Signature</b>	<b>Date Considered</b> 7 Nov 05
---------------------------	---------------------------------

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance or considered. Include copy of this form with next communication to applicant.

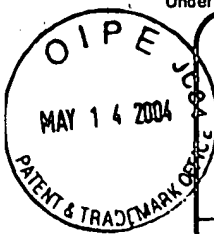
<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. The amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO:** Assistant Commissioner for Patents, Washington

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				Application Number	10/773,899
				Filing Date	February 6, 2004
				First Named Inventor	David J. Steele
				Group Art Unit	Unassigned <b>3672</b>
				Examiner Name	Unassigned
Sheet	1	of	3	Attorney Docket Number	2002-IP-008437 U1 USA

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
K	—	5,479,986	—	Gano et al.	01-02-1996	—
		6,026,903	—	Shy et al.	02-22-2000	
		5,979,560	—	Nobileau	11-09-1999	
		6,253,852	—	Nobileau	07-03-2001	
		5,330,007	—	Collins et al.	07-19-1994	
		5,388,648	—	Jordan, Jr.	02-14-1995	
		5,655,602	—	Collins	08-12-1997	
		5,695,008	—	Bertet et al.	12-09-1997	
		5,718,288	—	Bertet et al.	02-17-1998	
		6,252,852	—	Rowles et al.	06-26-2001	
		6,336,507	—	Collins	01-08-2002	
		6,564,867	—	Ohmer	05-20-2003	
		6,056,059	—	Ohmer	05-02-2000	
		6,089,320	—	LaGrange	07-18-2000	
		5,613,557	—	Blount et al.	03-25-1997	
		6,253,850	—	Nazzari et al.	07-03-2001	
		6,703,095	—	Busshoff et al.	03-09-2004	
		5,350,481	—	Shepard et al.	09-27-1994	
6,648,075	—	Badrak et al.	11-18-2003			
4,982,625	—	Bonner	01-08-1991	—		

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	-	WO	02/29207	-	Nobileau	04-11-2002	-	-
	I	WO	02/29208	I	Nobileau	04-11-2002	I	I
	I	WO	99/13195	I	Nobileau	03-18-1999	I	I
	I	WO	00/26501	I	Heijnen	05-11-2000	I	I
	I	GB	2353811	I	Baker Hughes Incorporated	03-07-2001	I	I
	I	GB	2275286	I	Baker Hughes Incorporated	08-24-1994	I	I

Examiner Signature	Date Considered <b>7 Nov 05</b>
--------------------	---------------------------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO

*(use as many sheets as necessary)*

Sheet 2 of 3

**Complete if Known**

<b>Application Number</b>	10/773,899
<b>Filing Date</b>	February 6, 2004
<b>First Named Inventor</b>	David J. Steele
<b>Group Art Unit</b>	Unassigned 3672
<b>Examiner Name</b>	Unassigned
<b>Attorney Docket Number</b>	2002-IP-008437 U1 USA

[illegible][illegible]

Examiner  
Signature

Date  
Considered

7 Nov 85

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**





+

+

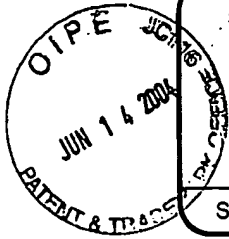
**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

**Complete if Known**

*(use as many sheets as necessary)*

Sheet 1 of 2

<b>Application Number</b>	10/773,899
<b>Filing Date</b>	February 6, 2004
<b>First Named Inventor</b>	David J. Steele
<b>Group Art Unit</b>	3672
<b>Examiner Name</b>	Unassigned
<b>Attorney Docket Number</b>	2002-IP-008437 U1

[illegible][illegible]

**Examiner  
Signature**

Date Considered

7 Nov 05

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

+



+

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/773,899
				Filing Date	February 6, 2004
				First Named Inventor	David J. Steele
				Group Art Unit	3672
				Examiner Name	Unassigned
				Attorney Docket Number	2002-IP-008437 U1
Sheet	2	of	2		

[illegible]

**Examiner  
Signature**

Date Considered

7 Nov 85

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

Approved for use through 07/31/2006. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
to a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no p

Substitute for form 1448/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

**Complete if Known**

<b>Application Number</b>	10/773,899
<b>Filing Date</b>	February 6, 2004
<b>First Named Inventor</b>	David J. Steele
<b>Art Unit</b>	3672
<b>Examiner Name</b>	K. Thompson
<b>Attorney Docket Number</b>	2002-IP-008437 U1 USA

Sheet	1	of	1
-------	---	----	---

## NON PATENT LITERATURE DOCUMENTS

[illegible]

**Examiner  
Signature**

Date  
Considered

7 Nov 05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.**

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

***If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.***

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
to a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet

1

of

2

**Complete if Known**

Application Number	10/773,899
Filing Date	February 6, 2004
First Named Inventor	David J. Steele
Art Unit	3672
Examiner Name	Thompson, Kenneth
Attorney Docket Number	2002-IP-008437 U1 USA

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Page No. <sup>2</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
[Signature]	-	WO 98/09054	03-05-1998	Baker Hughes Inc.	I	-
	-	WO 00/50733	08-31-2000	Shell Oil Company	I	II
	-	GB 2397600	07-28-2004	Halliburton Energy Services		-
	-	GB 2395210	05-19-2004	Weatherford/Lamb Inc.		-

**Examiner  
Signature**

Date  
Considered

7 NOV 85

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

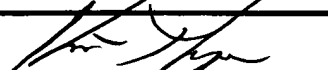
TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	10/773,899		
		Filing Date	February 6, 2004		
		First Named Inventor	David J. Steele		
		Art Unit	3672		
		Examiner Name	Thompson, Kenneth		
Sheet	2	of	2	Attorney Docket Number	2002-IP-008437 U1 USA

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
K	-	Search Report for United Kingdom application no.: GB0502350.2	-
		Cameron Controls, "Advanced Electro-Hydraulic Multiplexed Production Control System", undated	
		Hermetic Seal Corporation brochure, "High Temperature High Pressure Electrical Bulkhead Connectors", 1 pg.	
		Wireline Technologies Incorporated brochure, 1.50" Dia. Flowthru Wet-Connect and 1.50" Dia. Standard Wet-Connect, 2 pgs.	
		Schlumberger, "WCF Wet Connect Firing Systems", 2 pgs., 2004	
K	-	AnTech, "Coiled Tubing Downhole Tools", 4 pgs., 2001	-

Examiner Signature		Date Considered	7 Nov 05
--------------------	---	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not, citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.